# DESCRIPTIONS OF AUSTRALIAN CURCULIONIDÆ, WITH NOTES ON PREVIOUSLY DESCRIBED SPECIES.

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# Part IV.

[Read August 7, 1906.]

# SUB-FAMILY OTIORHYNCHIDES.

OTIORHYNCHUS SULCATUS, Fab.

O. SCABROSUS, Marsh.

O. CRIBRICOLLIS, Gyll.

These species all occur as garden pests in Tasmania. With the exception of *sulcatus* they have not previously been recorded as Australian.

# SUB-FAMILY CYLINDRORHINIDES.

#### OCYNOMA ANTENNATA, Pasc.

This species is very common about the Swan River, and is very destructive in spring and early summer to buds and leaves of the grape-vine. The scales are singularly easily abraded and discoloured. *Cordipennis*, Pasc., appears to be synonymous.

# PERPERUS MALEVOLENS, n. sp.

Black, appendages more or less obscurely diluted with red. Densely clothed with scales, varying from dingy-white to slaty-brown. With numerous setæ, dense, stout, and scarcely (or not at all) rising above the general level on head and prothorax, finer, sub-erect and more or less lineate in arrangement on elytra, dense and fine on under-surface, and long on tibiæ and muzzle.

*Head* with a feeble impression between eyes, these ovate. *Rostrum* the length of prothorax, moderately curved : tricarinate, the median carina acute and straight, the others more or less feebly waved. Scrobes deep in front, shallower behind. Antennæ not stout, scape extending to eye, first joint of funicle longer than second, and second longer than third, club slightly shorter than four preceding joints combined. *Prothorax* convex, slightly transverse, sides strongly rounded, base and apex almost truncate, ocular lobes fairly large and distinctly ciliated. *Scutellum* small but distinct. *Elytra* sub-ovate, base feebly incurved to middle, shoulders moderately rounded. *Legs* moderately long; front tibiæ with small but distinct teeth, the others edentate or almost so. Length (rost. incl.), 6-9 mm.

*Hab.*—Tasmania: Hobart, Huon River, Stonor, Parattah, etc.

The majority of the scales are of a dull-brown colour. but the sides of the prothorax and of the elytra are often supplied with more or less large patches of dingy-whitish scales, occasionally tinged with pale blue (but never shining), the white scales may also form small spots on the disc of the elytra and clothe the shoulders and a space between each shoulder and the scutellum; on the prothorax they are often condensed into feeble lines (two or three) on each side; white scales also occasionally surround the eyes and form feeble rings on the femora. On the upper surface the scales are more numerous than the setæ, on the lower the reverse is the case. The scrobes on abraded specimens can be quite distinctly followed to the eyes, but on perfect specimens do not appear to extend so far; on perfect specimens also the front parts appear to be much deeper than they really are; the front halves are arcuate and the scapes are so inserted that the portion in front of each would extend halfway to its fellow. On perfect specimens the only punctures which are visible are some forming series on the elytra, and these are distinct only at the base. But on abrasion the head, rostrum, prothorax, and tibiæ are seen to be densely covered with small punctures, on the prothorax these are often more or less confluent, and leave some subgranular spaces\* and a feeble median elevated line (scarcely a carina); elytra with regular series of large punctures becoming smaller posteriorly, the interstices separately gently convex and much wider than punctures, especially in the female; sterna and two basal segments of abdomen transversely strigose as well as punctate.

On only one specimen before me are the deciduous mandibular appendages present, they are unusually small (scarcely longer than the basal joint of funicle), curved outwardly, dilated to the middle internally and of a reddish colour.

The female differs from the male in being larger, the elytra wider and the basal segment of abdomen convex (instead of concave) in the middle. In several females before me portion of the ovipositor is protruding, and to all appearance is a horny reddish sheath to a penis; the resemblance

<sup>\*</sup> These subgranular spaces are not themselves punctate, and are much less distinct than the punctures, characters it is as well to mention, as there is a common (and apparently undescribed) species which closely resembles this, but differs in the characters mentioned.

<sup>+</sup> This is sometimes visible before abrasion.

is so striking that it was not till I had dissected such a specimen and found eggs that I was satisfied it really was a female.

I have referred this species to *Perperus*, although the antennæ arc rather short for that genus, but as there are no other aberrant characters it was not considered advisable to propose a new genus for its reception. \*

From the description of *languidus* it differs in being without an impressed line on the prothorax and the suture not carinated posteriorly.

### SUBFAMILY HYLOBIIDES.

ACLEES POROSUS, Pasc. †

Although not previously recorded as Australian this species appears to be as common in many parts of Queensland as in New Guinea. It extends also to the Clarence River in New South Wales. When living, specimens are covered with a pinkish meal, but this appears to be of an oily nature and cannot be preserved.

### SUBFAMILY ERIRHINIDES.

#### MISOPHRICE.

The genus Misophrice is a very interesting one on account of its clawless tarsi.<sup>‡</sup> It is practically confined to the *Casuarinæ*, and although on occasions I have taken specimens on other plants, there was always the suspicion that they were there only by chance. On the *Casuarinæ*, however, they very often swarm, and I have seen eight species and thousands of specimens in an umbrella (used for beating into) at the same time. The species are all slow moving, and being of very small size they are apt to be overlooked. The *Casuarinæ* also being, as a rule, unproductive of beetles, are often neglected by collectors. It is probably owing to these facts that no species have been recorded from the northern half of Australia, as wherever I have searched for them in Australia and Tasmania they were in abundance. In all the

\* In the majority of instances it is hardly advisable to describe single species the position of which is at all doubtful, but as this is a very destructive species in Tasmania it is as well that it should be named at as early a date as possible. It has been seen destroying many buds of the apple, apricot, gooseberry, and currant; but in its natural state may be taken in abundance on several species of *Leptospermum*.

† Journ. Linn. Soc., xi., 1873, p. 172.

<sup>‡</sup> The third joint is broad and appears to be slightly cleft in the middle; there really may be a claw-joint, but I have failed to discover any such under the microscope. species here described the first joint of the funicle is stout, about as long as the second and third combined, and the second slightly longer than the third. The rostrum also in all is glabrous, either entirely or only excepting a small part of its base.

There are two other genera of *Erirhinides* in Australia with clawless tarsi, and differing from *Misophrice* practically only in the number of joints of the funicle.

Funicle	with	five joints		 	 Anarciarthrum.
Funicle	with	six joints		 	 Misophrice.
Funicle	with	seven joint	s	 	 Thechia.

There is a genus of *Cryptorhynchides* (undescribed at present, but abundantly represented in Australia), the species of which bear a very strong general resemblance to the species of *Misophrice*, are clawless, and live on various species of *Casuarina*.

### MISOPHRICE SQUAMIVENTRIS, n. sp.

Black, rostrum (base and tip excepted), funicle, club, femora, and tibiæ reddish. Densely clothed with rounded scales of a more or less golden colour, but feebly variegated with obscure darker and silvery patches; under surface with paler scales than upper.

Rostrum thin, strongly curved, slightly longer than prothorax; with four punctate-striæ on the basal half and scattered punctures on the apical half. Prothorax moderately transverse, sides rounded and diminishing slightly to apex, base distinctly bisinuate; punctures dense but concealed. Elytra not much wider than prothorax, widest near base; striate-punctate, the punctures in striæ rather large but almost concealed, interstices with dense concealed punctures. Abdomen gently convex in one sex, slightly flattened in middle in the other. Length, 2-3 mm. Hab.—Tasmania: Hobart, Ulverstone, Launceston, Swan-

*llab.*—Tasmania: Hobart, Ulverstone, Launceston, Swansea (A. M. Lea); Victoria (National Museum).

On the prothorax three indistinct dark stripes can sometimes be traced: on the elytra across the middle pale scales form feeble markings, usually confined to alternate interstices. On the sterna and abdomen (except at the sides) the scales are often almost silvery-white, or with a slight bluish gloss, and they are just as dense on the abdomen as elsewhere, this being a very unusual feature in *Misophrice*, although equally dense in the following species.

Apparently nearer to squamosa than any other described species, but considerably smaller, rostrum not nearly straight, femora as well as tibiæ reddish, the funicle different, etc.

#### MISOPHRICE GLORIOSA, n. sp.

Black, parts of antennæ obscurely diluted with red. Densely clothed with rounded scales, varying from a dingy sooty-brown to a glittering green, or golden green, or blue, or silver, or gold.

Rostrum stouter than in the preceding species, but of similar shape and with similar punctures and stria. Prothorax feebly transverse, sides rather strongly rounded and decidedly diminishing in width to apex, base almost truncate; punctures concealed. Elytra slightly wider than prothorax, basal twothirds parallel-sided: striate-punctate, the punctures in striæ large and fairly distinct, those of the interstices concealed. Abdomen gently convex in one sex, flattened in middle in the other. Length,  $1\frac{2}{3}$ -2 mm.

*Hab.*—Tasmania: Hobart, Launceston, Frankford, Huon River (A. M. Lea).

The majority of the scales are usually of a more or less silvery green colour, but with fairly numerous glittering golden scales scattered about, especially on the elytra; on the elytra also the sooty scales are condensed into a large subapical illdefined spot on each side; the basal half of the suture is almost or quite glabrous, and the apical half is always clothed with glittering scales, which are in strong contrast to the scales near them. The lower surface is densely and uniformly clothed, but the scales also vary in colour. Along the middle of the prothorax the clothing is subsetose.

Variety A. Scales of upper surface mostly sooty; two longitudinal stripes on prothorax and sides with feebly glistening whitish scales, similar scales forming short lines on the elytra and clothing the suture almost to base, and a subtriangular space on the sides.

Hab.-Tasmania: Hobart (one specimen only).

Variety B. Scales of an almost uniform silvery colour, with a very slight coppery or bluish gloss, denser on suture, almost to base, than elsewhere. Abdomen sparsely clothed along middle.

Hab.-New South Wales: Sydney.

I have seen but one specimen, and have not described it as distinct. as possibly the abdomen has been partially abraded.

# MISOPHRICE APIONOIDES, n. sp.

Of a dingy testaceous-brown; head, base of rostrum, scutellum, suture, a postmedian and an apical spot on elytra, and the sterna black or piceous. Moderately clothed with whitish subsetose scales, becoming denser and more rounded on flanks of sterna than elsewhere. Rostrum curved, distinctly longer than prothorax; basal three-fourths with punctate-striae, apical fourth with scattered punctures. Prothorax moderately transverse, apex considerably narrower than base; with dense, fairly large, and only partially concealed punctures. Elytra at base slightly wider than prothorax, feebly dilating to beyond the middle; striate-punctate, the punctures rather large, and rounded, punctures in striæ small and only slightly concealed. Abdomen with distinct punctures; the two basal segments slightly concave in middle. Length,  $1\frac{3}{4}$  mm.

Hab.-New South Wales: Wollongong, Sydney (A. M. Lea).

The apical half of the antennæ is infuscate, and in one specimen the sides of the 1st and 2nd and the whole of the 3rd and 4th abdominal segments are infuscate. The postmedian spot seems to be an abbreviated fascia extending across the 2nd-5th interstices, the subapical spot being equidistant between it and the apex. In spilota there are three distinct spots, of which two are on the 5th and on the 3rd interstices; of those on the 5th the front one is almost in the exact middle of each elytron and considerably in advance of the inner one; the hind spot is not quite confined to the 5th and is more distant from the apex than the similar spot on apionoides. On one of the specimens the lateral prothoracic scales have a distinct rosy gloss. In general appearance the two specimens before me (apparently of one sex) strongly resemble many species of A pion.

### MISOPHRICE INFLATA, n. sp.

Almost flavous; head, tip of rostrum, scutellum and a subtriangular space about it, suture and a subapical elongated spot on each elytron, and tip of tibiae more or less dark; club and tarsi somewhat paler. Rather sparsely clothed with pale green, subsetose scales, becoming denser rounded and shining on flanks of elytra and of sterna; middle of abdomen and of sterna glabrous.

Rostrum rather feebly curved, no longer than prothorax : basal half punctate-striate, apical half seriate punctate. Prothorax rather strongly transverse, apex not much narrower than base; with rather coarse only partially concealed punctures. Elytra at base scarcely wider than prothorax, rather strongly dilated posteriorly; striate-punctate, punctures large and distinct, interstices convex, with finely rugulose punctures. Two basal segments of abdomen and the metasternum with fine transverse corrugations, and seriate punctures; the former gently concave in middle. Length,  $1\frac{1}{2}$  mm. *Hab.*—New South Wales: Nepean River (A. J. Coates). The two beautiful specimens before me are apparently of one sex.

### MISOPHRICE NICRIPES, n. sp.

Black; scape and elytra (sides, suture, and a rather large basal space excepted) of a dingy reddish-brown. Rather sparsely clothed with whitish or whitish-blue subsetose scales, absent along middle of under-surface.

Rostrum moderately curved, no longer than prothorax; basal two-fifths punctate-striate, elsewhere seriate-punctate. Prothorax moderately transverse, apex narrower than base; with large partially concealed punctures. Elytra not much wider than prothorax, slightly dilated posteriorly; striatepunctate, punctures large and not concealed. Abdomen with rather large distinct punctures; apical segment foveate in one sex, two basal segments feebly concave in the other. Length, 1 mm.

*Hab.*—Tasmania: Hobart, Huon River, Nubeena, Latrobe, Swansea (A. M. Lea).

Close to *clathrata*, but abdomen and legs black. The scales, especially at the sides, occasionally become of a rather bright green or coppery colour, but in nearly all the specimens before me are of a pale whitish blue and entirely without gloss. The first joint of the funicle is unusually stout and distinctly longer than the second and third combined. The size varies from slightly less to slightly more than one millimetre.

Variety A. Elytra almost or entirely black.<sup>\*</sup> Size slightly smaller.

Hab.-Tasmania: Hobart.

A minute black species is suggestive of *parallela*, but this variety is even smaller than that species and is not parallel-sided.

Variety B. Size,  $1\frac{1}{2}$  mm.

Hab.-Tasmania: Śwansea, Nubeena. Hobart.

The three specimens of this variety seem to differ only from the typical form in their size. They appear to be very close to *migriventris*, but differ in their entirely dark legs and antennæ.

### MISOPHRICE AMPLICOLLIS, n. sp.

Of a dingy reddish-brown, elytra and legs paler; head, scutellum, suture, and fifth interstice of elytra, sterna, abdomen, funicle (basal joint excepted), and club, black or piceous. Moderately denselv clothed with whitish subsetose

\* I have several intermediate forms in colour.

scales, denser on prothorax and head and sparser along middle of under-surface than elsewhere.

Rostrum moderately stout and curved, no longer than prothorax; basal half punctate-striate, the lateral striæ continuous to apex. Prothorax large, moderately transverse, sides strongly rounded, apex much narrower than base; with large partially concealed punctures. Elytra slightly narrower than prothorax, parallel-sided to near apex; punctatestriate, punctures large and partially concealed. Abdomen and metasternum with coarse, partially concealed punctures; two basal segments of former feebly concave in middle. Length,  $2\frac{1}{4}$  mm.

Hab.-Tasmania: Swansea, Hobart (A. M. Lea).

In shape much like the males of many species of *Mandalotus*, the dark portion of the 5th interstice terminates slightly before the apex; towards the apex it extends to the 4th and towards the base to the 6th interstices. On the prothorax the scales are condensed to form a distinct median line.

Variety A. Prothorax with sides rather less strongly inflated and no wider than elytra. Head, suture, sterna, and abdomen not dark; 5th interstice influscate for a short distance only. Length,  $2-2\frac{1}{4}$  mm.

Hab.—Tasmania: Launceston and Hobart.

This should perhaps have been described as the typical form.

Variety B. Prothorax as in A, but colour as in the type. Length, 2 mm.

Hab.—Tasmania: Launceston.

Variety C. Prothorax as in A, but abdomen paler than sterna. Length, 2 mm.

Hab.—Tasmania: Swansea.

### MISOPHRICE VICINA, n. sp.

Testaceous-brown; head, tip of rostrum, funicle, club, scutellum, suture, and an elongated postmedian spot on 5th interstice, piceous or black; tarsi pro- and flanks of metasternum more or less infuscate. Rather sparsely clothed with whitish subsetose scales, absent from most of abdomen.

Rostrum thin, moderately curved, longer than prothorax, basal third striate, elsewhere smooth and almost impunctate. Prothorax and elytra much as in the preceding species, except that the prothorax is no wider than the elytra and its sides are less rounded, the elytra also are not quite so parallel-sided. Two basal segments of abdomen and metasternum with fine transverse corrugations and large sparse punctures; apical segment foveate in one sex, the two basal feebly concave in the other. Length,  $1\frac{1}{4}$ - $1\frac{1}{2}$  mm. Hab.-Tasmania: Hobart, Swansea (A. M. Lea).

Allied to the preceding species, but the first joint of the funicle is considerably stouter, and the abdomen (except at sides of base) is glabrous; in *amplicollis* and all its varieties the abdomen is fairly densely clothed, the scales being present (although rather sparse) even along the middle. The largest specimen of this species also is smaller than the smallest of that one. The marking on the 5th interstice is of variable length and intensity, but never extends to the base.

#### MISOPHRICE HISPIDA, Pasc.

The pale scales of this species are easily discoloured, but it can be readily identified by the setæ, which are much longer, sparser, and stouter than in *argentata*, *setulosa*, or *alternata*. It was described originally from South Australia, but occurs also in New South Wales, Victoria, and Tasmania.

### MISOPHRICE VARIABILIS, Blackb.

In a South Australian and several Tasmanian specimens before me the scales on the upper surface are of a beautiful golden colour, instead of white.

Hab.—South Australia; Tasmania: Hobart, Launceston, Swansea.

# MISOPHRICE SUBMETALLICA, Blackb.

It is only in one sex (female ?) that there is a "deep impression occupying the whole of the middle part of the basal two ventral segments"; in the other sex this space is flat, and the apical segment has a large shallow impression.

Hab.—S. Australia; Tasmania: Hobart, Mount Wellington (including the summit), Launceston, Swansea.

#### MISOPHRICE SETULOSA, Blackb.

There are before me numerous specimens of a species (I have only taken it in Tasmania, but it is there the commonest of all) which either belong to setulosa, or to an undescribed species of the colour of setulosa. Blackburn says, "Elytrorum disco . . . testaceis vel rufescentibus." In some of the Tasmanian specimens the elytra have a subtriangular basal patch, and the suture and sides narrowly infuscate; but the basal patch varies in area and the lateral dark markings are frequently absent. The green scales usually form a distinct line on each side of the suture, and are often rather dense across the base; but it is not uncommon for more than half of the scales on the upper surface to become abraded, and there are specimens before me in which practically all the scales and setæ have been abraded. The scales are usually of a beautiful metallic green, occasionally with a golden gloss, but they are sometimes of a rather pale blue. The sexual impressions of the abdomen are much as in *submetallica*, and one sex has more parallel-sided elytra than the other.

M. OBLONGA, Blackb. ; *Hab.*—South Australia ; New South Wales : Victoria : Tasmania.

M. VIRIDISQUAMA, Lea; Hab.-Victoria; Tasmania.

# THECHIA PYGM.EA, Pasc.

There are before me numerous specimens (from New South Wales, Victoria, and Tasmania) of a species which either belong to T. pygmaa or to an undescribed species. Had they been from Western Australia, I should have referred them to pygmaa without hesitation. The description of that species, however, is not very satisfactory; of its clothing Pascoe says, "squamis pallidis griseis vestita"; and again, "Judging from my specimen, it is probable that the insect in a fresh state is tolerably closely covered with scales." The specimens before me have the head, base of rostrum, front and sides of prothorax, under-surface and legs more or less densely clothed with white, almost circular scales, having, under the microscope, a peculiarly granulated appearance, much like softened snowflakes. The elytra (except at the sides) and disc of prothorax are almost glabrous. Except that the funicle is seven-jointed there is nothing to distinguish it from Misophrice. Of Thechia, Pascoe says, "prothorax transversus"; but of pygmaa he says, "prothorace latitudine longitudini aequali. In my specimens the prothorax is very distinctly but not strongly transverse. The size varies from 11 to 2 mm.

### CYTTALIA APICALIS, n. sp.

Black; tip of rostrum, of elytra, and of abdomen diluted with red; appendages flavous; two apical joints of club and of tarsi piceous. Under-surface rather densely clothed with white subsetose scales, upper-surface less densely clothed, prothorax with transversely decumbent setæ, elytra with fine sparse pubescence and regular rows of stout yellowish decumbent setæ.

Rostrum the length of prothorax. Scape slightly longer than funicle. Elytra with punctures in striæ rather large and subapproximate, interstices with sparse punctures. Anterior femora feebly dentate. Length,  $2\frac{1}{2}$  mm.

Hab.-New South Wales: Mount Victoria (A. M. Lea).

In general appearance close to *rufipes* (from Western Australia), but the rostrum decidedly longer, thinner, and reddish at its tip, the club not entirely dark, etc.

<sup>\*</sup> The lengths given are exclusive of the rostrum.

#### CYTTALIA LONGIROSTRIS, n. sp.

Reddish-testaceous; under-surface (apex of abdomen diluted with red), head, rostrum, scutellum, and club black. Clothing as in the preceding species, except that on the under-surface it is not quite so dense, and that the elytral setæ are paler and more erect.

Rostrum thin, feebly curved, considerably longer than prothorax. Scape as long as funicle and club combined. Elytra with distinct punctures, but which are considerably narrower than the interstices; these almost impunctate. Anterior femora acutely dentate. Length  $3-3\frac{1}{4}$  mm.

Hab.—New South Wales: Mount Kosciusko, 5-6,000 feet (R. Helms), vicinity of Jenolan Caves (J. C. Wiburd).

The rostrum is unusually long and thin, and this with the black colour of the same will readily distinguish the species from all those previously described.

### CYTTALIA PICEOSETOSA, n. sp.

Reddish-testaceous, in places stained with piceous or black. Under-surface, sides of prothorax, and about eyes with soft white scales irregularly distributed; upper-surface with sparse pubescence; the prothorax and elytra with rather long, thin, dark, sparse setæ.

Rostrum feebly curved, distinctly longer than prothorax. Scape almost as long as funicle and club combined. Elytra with fairly large punctures in striæ, interstices almost impunctate. Anterior.femora acutely dentate. Length, 3 mm. Hab.—Tasmania: Huon River (A. M. Lea).

The elytral setæ are sparser, darker, and much less distinct than in any other species known to me. The head and prothorax are moderately dark, the dark parts of the elytra are nowhere sharply defined, but form a large irregular triangle about the scutellum, thence an irregular patch extends to beyond the middle, dilating to the sides; the shoulders are not dark; the metasternum is almost black, and the two basal segments of abdomen are piceous; the club is moderately dark. I have seen but one specimen.

#### CYTTALIA OLEARIÆ, n. sp.

Reddish-testaceous, elytra, abdomen, and appendages almost flavous, club black. Sterna with subsetose whitish scales, elsewhere with moderately dense whitish pubescence, prothorax with transverse decumbent setæ, elytra with regular rows of semi-decumbent setæ.

Rostrum in one sex the length of prothorax, in the other distinctly longer, feebly curved. Scape almost as long as funicle and club combined. Elytra with fairly large but almost concealed punctures in striæ. Front *femora* very feebly dentate. Length,  $2\frac{1}{3}$ -3 mm.

*llab.*—Tasmania: widely distributed and abundant on flowers of the native musk (Olearia argophylla).

The colours as described are those of the most abundant form, but there are many varieties. The metasternum is often black; when it is black the prothorax is often black also, also the head, rostrum (except at tip), and scutellum; the black colour often extends from the metasternum on to the abdomen. often to its apex, also to the sides of the elytra. I have seen no specimens in which the elytra are entirely dark, but two have the sides widely dark, with a distinct spot on each side just beyond the middle. Faint indications of these spots are to be seen on many other specimens. The elytral pubescence is much denser, whilst their setæ are less distinct and finer than in *Erichsoni*, *Sydneyensis*, and *tarsalis*. Looked at from the side the clothing seems much as in *Sydneyensis*, but when viewed directly from above it is seen to be very different.

On the elytra there are frequently to be seen four large yellowish spots, and the sides of the prothorax are often widely yellowish; but these spots are due to pollen, with which the specimens are usually densely covered when obtained, and they can readily be removed with a soft brush.

### CYTTALIA ERICHSONI, Pasc.

In the type, and in the majority of specimens of this common and widely distributed\* species, the two terminal joints of the club are dark, but I have single specimens from New South Wales, Victoria, and South Australia in which only one joint is dark.

#### CYTTALIA TARSALIS, Blackb.

*Hab.*—New South Wales: Queanbeyan, Mount Victoria, Ben Lomond, Mount Kosciusko; Tasmania: Hobart, Frankford, summit of Mount Wellington, Huon River.

### CYTTALIA SYDNEVENSIS, Blackb.

*Hab.*—New South Wales; Sydney, National Park, Shoalhaven, Forest Reefs; Western Australia: Karridale.

### CYTTALIA MACULATA, Lea.

Hab.-Western Australia: Karridale.

\* I have specimens from New South Wales, Victoria, Tasmania, and South Australia.

# Subfamily BARIDIIDES.

I have examined a considerable number of genera and species referred to this subfamily from various parts of the They all have the side pieces of the mesosternum world. almost or quite soldered together, large, and thrust like a stout wedge between the flanks of the prothorax and elytra. The main features relied upon for distinguishing the genera and sections are the degrees of obliquity of the pygidium, the apical segment of abdomen rounded or emarginate at its tip, the prosternum channelled or not, the shape of the rostrum and dentition of femora. Only three genera and seven species have previously been recorded from Australia; of these Baris\* is world-wide in its distribution, Muctides occurs in New Guinea and the Malay Archipelago, and Platyphœus, † so far as is known, only from Queensland. In Masters' Catalogue, Aphela is placed in the subfamily, but wrongly so. 1 The Australian genera known to me, including some now first recorded or proposed, may be tabulated as follows: --

Prosternum deeply grooved	 Solenobaris.
Prosternum feebly grooved.	
Pygidium concealed	 Gymnobaris.
Pygidum exposed	 Baris.
Prosternum not grooved.	
Prothorax truncate at the apex¶	 Acythopeus.
Prothorax not truncate at apex.	
Pygidium covered or nearly so	 Ipsichora.
Pygidium not covered	 Myctides.

### BARIS.

To this genus I refer a number of species which might be regarded as belonging to several closely allied genera, but I do not think it desirable to propose new generic names for any of them, as the differences seem to be too slight to warrant generic rank. They all have the pygidium vertical, or almost so, and that organ causes the fifth ventral segment to

\* Baridius of various authors.

<sup>+</sup> The coarsely-faceted eyes and approximate front coxæ of this genus must appear strangely at variance with the other genera of the subfamily.

<sup>‡</sup> Pascoe did not refer it to any subfamily at the time he described it, but subsequently (T.E.S., Lond., 1870, p. 23), he referred it to the *Amalactides*. It certainly does not belong to the *Baridiides*, the side pieces of the mesosternum being utterly at variance with the genera of that subfamily; nor does it seem very much at home with the Australian genera of *Amalactides*. It certainly belongs to the same subfamily as *Psaldus*, referred by Pascoe to the *Molytides*.

¶ Simply quoted from Pascoe.

appear emarginated at its apex; and they may be divided into the following sections: ---

1. Prosternum from apex halfway or almost halfway to coxæ, with a shallow groove, bordered by distinct and usually carinated ridges.<sup>\*</sup> This section is the most numerously represented in Australia, and is allied to European species, such as *scolopacea*.

2. Like Section 1, but with the frontal ridges of the prosternum continued to between the coxæ; the eyes also are more coarsely faceted than is usual in the family.

3. Prosternal groove as in Section 1, but rostrum subgibbous at base.

4. Prosternum with a shallow and wide groove to between coxæ, not bounded by carinated ridges, and with two distinct punctures in front.

5. Prosternum without grooves and ridges in front, but with two distinct punctures marking the position of the ridges. $\dagger$ 

6. Prosternum as in Section 1, but rostrum suddenly gibbous at base.

7. Pectoral canal narrow and continuous to between anterior coxæ, and bounded by ridges (but which are not carinated). Tip of abdomen just perceptibly emarginated. The pectoral canal is more distinct than in the other sections, being much as in the European *abrotani*, with which, however, *ebenina* has little else in common.

8. As Section 6, but rostrum much shorter.

The following table of species known to me is arranged for convenience of identification only: —

Elytral interstices with coarse punc-	norosa
Elytral interstices not coarsely punc-	1,01,000.
Upper surface with clothing in iso-	
Prothorax and elytra both with scales.	
Elytral markings transverse Elytral markings longitudinal.	niveonotata.
Prothorax with four isolated spots	leucospila.
Prothorax with two stripes	devia.

\* These ridges, however, can usually be seen with difficulty, until the head is removed.

+ These punctures are to be seen in several other sections, but are usually concealed by the clothing.

Prothorax without scales.	
Elytra with six spots	albopicta.
Elytra with two spots.	
Spots basal	tenuistriata.
Spots subapical	albigutta.
Upper surface glabrous.*	
Size very minute	microscopica.
Size larger.	
Prothorax with very coarse punc-	
tures at sides	sublaminata.
Prothorax with much less coarse	
punctures at sides.	
Prosternum grooved to between	
front coxæ	ebenina.
Prosternal groove much short-	
er and less distinct.	
Scutellar lobe with a few	
scales	sororia.
Scutellar lobe without scales	glabra.
Upper surface with clothing not con-	
densed into spots only.	
Eves not very finely faceted	elliptica.
Eves finely faceted.	<i>'</i>
A deep notch between head and	
base of rostrum	basirostris.
Without such a notch.	
Elvtra no wider than prothorax	oblonga.
Elytra wider than prothorax.	.,
Elvtra with isolated scales	angophoræ.
Elytra with scales in linear	., 1
arrangement.	
Less than 1 <sup>1</sup> mm, in length	Australia.
	subopaca.
More than $1\frac{1}{2}$ mm. in length	vagans.

BARIS LEUCOSPILA, Pasc. †

(? Baris amoenula, Boh.)

Described by Pascoe from Katau, but fairly common in Queensland.<sup>‡</sup> The markings of the upper surface are very peculiar, and are exactly as in the description of *amænula*, but the prothorax could scarcely be called carinated. Some specimens, it is true, have a feeble median line, but Boheman, in his short diagnosis of *amænula*, calls it "carinato," whilst in the full description he says, "linea dorsali longitudinali subelevata, lævi." He also says the scutellum is clothed with white scales, whilst in the ten specimens before me it is glabrous. Of the rostrum he says, "piceum, subnitidum, subtiliter punctulatum." In the specimens before

\* Microscopica is included here, as its clothing is so sparse and indistinct that it might fairly be regarded as glabrous; in sororia the only scales are a few on the scutellar lobe.

† Ann. Mus. Civ Gen., 1885, p. 291.

1 Cairns, Port Denison, etc.

me the basal half of the rostrum is opaque, and with coarse punctures, but the apical half is shining and with sparse and minute punctures. If the species is  $am \approx nula$ , as seems quite possible, then *leucospila*, as the later name, will have to be dropped. The size ranges from  $3\frac{1}{2}$  to  $4\frac{1}{2}$  mm.

### BARIS AUSTRALIS, BOI.

The description \* of this species is too short to enable any insect to be positively identified from it, but such as it is it fits the preceding species and no other known to me from Australia.

### Section 1:†

#### BARIS ANGOPHORÆ, n. sp.

Black, shining. Upper surface head and rostrum sparsely, elsewhere moderately densely clothed with white scales.

Head with dense punctures larger at apex than at base. Rostrum distinctly longer than prothorax; a slight depression marking its junction with head, densely and coarsely punctate on sides, punctures sublinear in arrangement along middle. Scape inserted slightly beyond the middle in male, slightly before it in female; basal joint of funicle stout, not twice as long as second. Prothorax with dense, rather large, clearly defined punctures becoming small at middle of apex. Elytra cordate, striate, the two sutural striæ with distinct punctures towards base, interstices each with a single row of somewhat irregular and not clearly defined punctures. Femora edentate. Length,  $2\frac{2}{3}$  mm.

Hab.—New South Wales: Ash Island (Macleay Museum), Narrabeen (W. W. Froggatt), Sydney, National Park (A. M. Lea).

The whole insect is somewhat briefly elliptic in outline; the prothorax is fully twice as wide at base as at apex, its base is strongly bisinuate, sides strongly rounded, disc moderately convex and the scutellar lobe slightly flattened, all these being characters common to most of the species here described. The punctures in the elytral interstices are not very clearly defined, but when seen obliquely appear to be in single rows; some of them are transverse; the lateral interstices from certain directions appear to be overlapping. The white scales are absent from the disc of the prothorax, but are

<sup>\* &</sup>quot;Ater, albo-lineatus, thorace ruguloso; elytris punctatostriatis."

<sup>+</sup> I have not usually considered it necessary to describe in each of the species the characters for which they are placed in the various sections.

condensed into feeble spots at the sides and middle of base\*: on the elytra the scales are isolated and very sparse. The species may be taken in abundance on Angophora corditolia.

### BARIS SORORIA, n. sp.

Black, shining; antennæ and tarsi almost black. Upper surface (except for a few scales on the scutellar lobe of the prothorax), head, and rostrum glabrous; elsewhere moderately clothed with white scales.

Rostrum slightly longer than the prothorax, its punctures and those of head, and the antennæ, much as in the preceding species. Prothorax and elytra of the same shape as in the preceding species, but the punctures of the former rather larger: the punctures of the elytral striæ are larger, more numerous, and not confined to the two near the suture, and the interstices have larger punctures, many of which are distinctly transverse, and extend almost from stria to stria. *Femora* feebly dentate. Length, 3 mm.

*Hab.*—Queensland: Capes Grenville and York, Endeavour River, Port Denison (Macleay Museum), Cairns (E. Allen).

Very close to the preceding species, but larger, rostrum shorter, and sides of prothorax without scales; in *angophoræ* the scales are very distinct at the sides, but in the present species they are entirely absent. I have examined numerous specimens of both species.

#### BARIS SUBOPACA, n. sp.

Black, subopaque. Upper surface with scattered whitish scales, condensed into lines on the elytra; under surface and legs with denser and whiter scales.

*Head* with very feeble punctures except between the eyes. *Rostrum* the length of prothorax, a feeble depression marking its junction with head, with dense and rather coarse punctures at base and sides, feeble and sublinear in arrangement elsewhere. Antennæ as in preceding species. *Prothorax* densely and rather coarsely punctate, with traces of a feeble median elevation. *Elytra* striate, the interstices punctate. *Femora* edentate. Length,  $2\frac{1}{4}$  mm.

*Hab.*—New South Wales: Galston, Sydney (D. Dumbrell and A. M. Lea).

Of a decidedly more elongate form than the two preceding species, the prothoracic punctures not so clearly defined

<sup>\*</sup> On numerous specimens the scales on the prothorax just above the scutellum form a very distinct spot, but they are easily abraded.

owing to their density; the elytral striæ with punctures which do not encroach on the interstices, and are only visible from certain directions, and the interstices each with a single row of punctures, but these, although perhaps larger than in those species, are not so clearly defined. The scales of the upper surface are easily abraded, but in perfect specimens form single and regular lines on the elytral interstices, except the sutural (where there are none), on the prothorax they are not condensed into a spot on the scutellar lobe.

#### BARIS VAGANS, n. sp.

Black, moderately shining. Upper surface clothed with very fine scales or setæ, forming regular lines on the elytral interstices; lower surface and legs with larger (but still small) scales.

*Head*, rostrum, and antennæ as in the preceding species. *Prothorax* with more clearly defined punctures; *elytra* with narrower striæ, the interstices each with a single row of small but round and clearly defined punctures. *Femora* edentate. Length, 2 mm.

*Hab.*—New South Wales: Gosford, Galston; Tasmania, Hobart, Mount Wellington (including the summit), Huon River, Frankford (A. M. Lea).

In general appearance close to the preceding species, but smaller, and with the punctures more clearly defined. The clothing of the upper surface is very fine, and it is only on a close examination that its slightly speckled appearance is seen to be caused by very thin whitish scales or setæ, although in certain lights the elytra appear to have very fine whitish lines. It is as yet the only species of its subfamily known to occur in Tasmania, where it is fairly common on *Pultenea* juniperina.

### BARIS AUSTRALIÆ, n. sp.

Black. Clothed with distinct whitish scales, and forming regular lines on the elytra.

*Head* with fairly distinct punctures, becoming rather coarse between the eyes. *Rostrum* stout, scarcely, if at all, longer than prothorax, with distinct punctures on top of the apical half and coarse ones elsewhere. Antennæ stout; scape inserted nearer apex than base of rostrum; basal joint of funicle very stout. *Prothorax* with numerous and fairly large but partially concealed punctures; apex more than half the width of base. *Elytra* elongate-cordate, shoulders distinctly wider than prothorax, their outline not almost continuous with it; punctures in striæ and in interstices more or less concealed. *Femora* edentate. Length,  $1\frac{1}{4}$  mm.

Hab. - New South Wales : Galston, Sydney ; Western Australia : Swan River, Vasse, Bunbury, Donnybrook (A. M. Lea).

Apparently the most abundant and widely distributed of all the Australian Baridiides; although considerably smaller than the preceding species, the clothing is much the same, except that on the elytra it is more distinct, on most of the specimens before me the lines are sufficiently clear, although the scales are small, but in a few the lines and scales are both very distinct.

### BARIS OBLONGA, n. sp.

Black: legs of a dull red, apex of rostrum and antennæ darker. Densely clothed with whitish scales and forming regular lines on the elvtra.

Head with indistinct punctures, except between eyes. Rostrum just perceptibly longer than prothorax, rather feebly curved and thinner than usual : with coarse, partially concealed punctures on sides and base, and moderately distinct towards apex on upper surface. Scape inserted about two-fifths from apex of rostrum. Prothorax parallel-sided to near apex, punctures concealed. Elytra parallelsided, no wider than prothorax; striæ distinct but punctures concealed, Femora feebly dentate. Length, 13 mm.

Hab.--Western Australia: Geraldton (A. M. Lea).

On the lower surface and legs the scales are almost of a snowy whiteness, but on the upper surface and on the flanks of the prothorax they are tinged with yellow; the scales on the elytra, although condensed into distinct lines, are not placed singly, as in some of the preceding species. The base of the head is sparsely clothed and the apex of the rostrum is nude.

### BARIS MICROSCOPICA, n. sp.

Black, moderately shining. Upper surface almost glabrous, lower sparsely clothed with white scales.

Head with distinct punctures between eyes, but feeble elsewhere. Rostrum stout, scarcely the length of prothorax; shining and feebly punctate on upper surface, and moderately coarsely on sides. Scape inserted almost in exact middle of rostrum. Prothorar with rather large, clearly defined punctures, except in middle of apex. Elytra very little wider than prothorax, parallel-sided to near apex: with narrow not visibly punctured striæ, interstices each with a row of minute punctures. Femora edentate. Length, 1 mm. Hab.-Western Australia: Geraldton (A. M. Lea).

The non-squamose body distinguishes this from the other Western Australian species: it is the smallest known Australian species of its subfamily.

#### BARIS SUBLAMINATA, n. sp.

Black, shining, antennæ and tarsi of a dull reddish brown, scape somewhat paler. Under surface and legs with fine setose scales, elsewhere glabrous.

*Head* with small and sparse punctures between eyes, very indistinct elsewhere. *Rostrum* thin, longer than prothorax. flattened but not depressed at its junction with head; with coarse punctures at sides, upper surface with moderately strong punctures on basal half, but becoming much smaller and sparser towards apex. Scape inserted about two-fifths from apex of rostrum; basal joint of funicle almost twice as long as second. *Prothorax* with large, dense, clearly-defined punctures, becoming much smaller and sparser (but still clearly defined) at apex and along middle. *Elytra* cordate; narrowly striate, the two sutural striæ with a few rounded basal punctures. encroaching on the interstices, the lateral striæ with distinct but deeply set punctures. *Femora* feebly dentate. Length,  $3\frac{3}{4}$  mm.

Hab.-Queensland: Cairns (Macleay Museum).

At first sight very suggestive of Myctides, but the short pectoral groove, apart from other characters, prevents it from being placed in that genus. In shape it is much like *angophore* and *sororia*, but much larger, and punctures very different. The large punctures at the sides of the prothorax are each almost the size of the scutellum. The lateral interstices seem to be slightly overlapping, and the seriate punctures of all of them are so small as to be practically absent.

### Section 2.

### BARIS ELLIPTICA, n. sp.

Black or almost black, rostrum and appendages of a dull red. Moderately densely clothed with whitish setiform scales and forming lines on the elytra.

*Head* almost impunctuate except between eyes, with traces of a feeble median line. Eyes more coarsely faceted than usual. *Rostrum* distinctly longer than prothorax, rather thin, rather suddenly arched at base, with a distinct but not deep depression marking its junction with head; with coarse punctures at base and sides and sparser and smaller (but not very small) ones elsewhere. Scape inserted about two-fifths from apex of rostrum. *Prothorax* with fairly large punctures, but which are more or less concealed by clothing. *Elytra* slightly wider than prothorax, parallel sided to near apex; deeply striate, punctures of striæ and interstices more or less concealed. *Femora* edentate. Length,  $3\frac{1}{4}$  mm.

Hab.-North-west Australia: Derby (R. Helms).

The outline is almost perfectly elliptic. The eyes are less finely faceted than usual, but they are certainly not coarse. The colour is somewhat variable; in two specimens the legs are very slightly paler than the body, in two others they are more noticeably paler, and in a fourth very decidedly The under surface is sometimes dilupale. ted with red. The upper surface is never of the deep jetty black so characteristic of Baris. On the upper surface the scales are not quite so white as on the lower; the lines of white scales on the elytra are very distinct, but in addition to these there are some slate-coloured ones, which at first sight are apt to be overlooked, but they may really be discoloured white ones, as they are much more numerous on some specimens than on others.

#### Section 3.

### BARIS GLABRA, n. sp.

Black, shining; basal half of scape of a dull red. Glabrous.

Head with moderately distinct punctures between eyes, small and indistinct elsewhere. Rostrum rather stout, slightly longer than prothorax; with coarse punctures becoming very coarse at base and sides, a distinct depression marking its junction with head. Scape inserted about one-third from apex of rostrum. Prothorax with fairly numerous and clearly defined but not very large punctures on disc, becoming denser and larger on sides. Elytra elongate-cordate, distinctly wider than prothorax; narrowly striate towards base, with punctures in striæ, but these distinct and encroaching on interstices only towards the suture; interstices with scarcely visible punctures. Femora finely but acutely dentate. Length,  $2\frac{2}{3}$  mm.

Hab.-Queensland: Cairns (Macleay Museum).

In general appearance close to *sororia* (which also occurs at Cairns), but the elytral interstices practically impunctuate, and the prothoracic punctures sparser.

# BARIS ALBOPICTA, n. sp.

Black, highly polished, basal half of funicle and the scape of a dull red. Clothed with snowy white scales, irregularly distributed and forming elongated spots in places.

*Head* with small and rather sparse but clearly defined punctures. *Rostrum* rather thin, slightly longer than prothorax, its junction with head marked by a depressed line, with rather small but clearly-defined punctures, except at sides of base, where they are concealed by scales. Scape inserted about two-fifths from apex of rostrum, basal joint of funicle stouter, but not longer than second. Prothorax with clearly-defined but small and not dense punctures, becoming larger at base and sides. Elytra elongate-cordate, outline almost continuous with that of prothorax; punctatestriate, punctures deeply set and encroaching on interstices only towards the base; interstices with sparse and exceedingly minute punctures, the lateral ones with an appearance as of feebly overlapping. Femora acutely and rather strongly dentate. Length, 6 mm.

Hab.—Queensland: Cape York (type in Macleay Museum).

The upper surface is glabrous, except for three distinct spots on each elytron; of these two are on the fourth interstice (one basal, one—the longest of all—post-median), and one on the second (apical and slightly smaller than the basal one). 'The legs are moderately densely clothed, but the apex of the upper surface of each of the femora has a similar patch to those on the elytra; apex of prosternum, sides of metasternum, and sides of rostrum behind the antennæ with large scales, elsewhere almost or quite glabrous.

#### BARIS TENUISTRIATA, n. sp.

Black, highly polished. Upper surface glabrous, except for a patch of white scales on the third interstice of the elytra at the base; lower surface sparsely clothed with indistinct whitish scales, but a distinct patch on the flanks of the metasternum; legs with moderately distinct scales.

Head with moderately large but clearly-defined punctures. Rostrum no longer than prothorax, its junction with head marked by a transverse impression, base wider than apex; with coarse punctures at sides and base, smaller (but distinct) along middle, and fine at apex. Scape inserted slightly nearer apex than base, basal joint of funicle distinctly longer than second. Prothorax almost parallel-sided to near apex; with rather sparse and small but clearly-defined punctures. Elytra elongate-cordate, scarcely wider than prothorax; very narrowly striate, the four sutural striæ at base with more or less rounded and distinct punctures, elsewhere and the interstices impunctate. Femora edentate. Length, 3 mm.

Hab. — Queensland: Cape York, Cairns (Macleay Museum), Barron Falls (A. Koebele).

The highly-polished upper surface, glabrous except for a patch of white scales on each side of the base of the elytra, renders this a very distinct species.

### Section 4.

### BARIS ALBIGUTTA, n. sp.

Black, highly polished; base of scape of a dull red. Upper surface glabrous, except for a stripe of snowy scales on the fifth interstice, extending from just beyond the middle to near the apex; sides of base of rostrum and sterna with a few large scales, rest of under surface with subsetose clothing, or glabrous, legs (except parts of femora where the scales are dense) with rather sparse clothing.

*Head* as in the preceding species. *Rostrum* scarcely the length of prothorax; with coarse concealed punctures at base and basal half of sides, small but distinct punctures on apical half of sides, and fine elsewhere. Scape inserted almost in exact middle of rostrum; basal joint of funicle twice as long as second. *Prothorax* and *elytra* as in the preceding species, except that the punctures are more distinct, and in the elytral striæ a few small ones are to be seen towards the sides. *Femora* edentate. Length, 4 mm.

*Hab.*—Queensland: Cairns (type in Macleay Museum). In general appearance close to the preceding species, but the white elytral scales subapical instead of basal.

#### Section 5.

#### BARIS NIVEONOTATA, n. sp.

Black, highly polished; head, rostrum, legs, and sides of elytra more or less obscurely diluted with red, antennæ (club excepted) of a more distinct red. Prothorax and elytra with irregular spots of large, soft, pearly-white scales; sterna, legs, and rostrum with subsetose scales; flanks of metasternum with somewhat similar scales to those of upper surface; elsewhere glabrous or almost so.

*Head* with indistinct punctures, even between eyes. Rostrum slightly longer than prothorax, rather strongly but not suddenly arched at base, with coarse but partially concealed punctures on sides, base with large, clearly-defined punctures, becoming much smaller (but still clearly defined) to apex. Scape inserted about two-thirds from apex of rostrum; basal joint of funicle as long as the three following combined. Prothorar with strongly rounded sides: disc with fairly large and clearly-defined but not dense punctures, but becoming dense on sides. Elytra elongate-cordate, distinctly wider than prothorax; punctate striate, punctures in striæ deeply set; interstices each with a row of minute punctures. Femora edentate. Length,  $4\frac{1}{2}$  mm.

Hab.--North-west Australia (Macleay Museum).

On the prothorax the scales are formed into irregular spots at the sides, on the elytra they form four distinct spots (appearing much like interrupted fasciæ), two basal and two postmedian; in addition a few are scattered about singly or are clustered together to form small spots.

### Section 6.\*

#### BARIS BASIROSTRIS, n. sp.

Of a dingy reddish-brown and subopaque. Moderately densely clothed with yellowish subsetose scales.

Head with moderately distinct punctures. Rostrum slightly longer than prothorax, base much wider than apex, suddenly and strongly arched; apical half of upper surface with moderately distinct punctures, elsewhere with coarse but more or less concealed punctures. Scape inserted in exact middle of rostrum; basal joint of funicle as long as the two following combined. Prothorax parallel-sided to near apex; with dense and fairly large but partially concealed punctures. Elytra elongate-cordate. not much wider than prothorax; deeply striate, punctures in striæ and interstices more or less concealed. Femora edentate. Length,  $3\frac{1}{2}$  mm.

Hab.-Queensland: Cairns (Macleay Museum).

The apical half of the rostrum is glabrous, and the scales are condensed into a feeble median line and a distinct spot on each side of base of prothorax, and into feeble spots on the elytra; but with these exceptions the clothing is fairly evenly distributed.

Seen from the side, there appears to be a deep notch between the head and base of rostrum in this and the following species, much as in Pascoe's figure of *Acythopeus bigeminatus.*<sup>†</sup>

#### BARIS DEVIA, n. sp.

Reddish-brown and shining, scape somewhat paler. With soft yellowish scales, sparsely and irregularly distributed on the under surface, clothing the sides of base of rostrum. and formed into elongated spots on the upper surface.

*Head* with rather dense but not clearly defined punctures. *Rostrum* slightly longer than prothorax: with coarse punctures except at tip; its junction with head as in preceding species. Scape inserted one-third from apex of rostrum; first joint of funicle as long as the two following combined. *Prothorax* with clearly-defined but not very large or dense punctures on disc, becoming larger and denser at sides. *Elytra* striate, with fairly distinct punctures in striæ towards base and sides; interstices each with a single row

<sup>\*</sup> Leucospila belongs to this section.

<sup>†</sup> Journ. Linn. Soc. Zool., xiii., pl. iii., fig. 17.

of indistinct but not very minute punctures. Fermiora edentate. Length,  $3\frac{1}{4}$  mm.

*Hab.* – Queensland: Cape York, Cairus (Macleay Museum).

There are a few irregular scales at apex of elytra, but except for these the clothing on the upper surface is condensed into elongated spots, of which there are three on each elytron, one on the ninth interstice before the middle, and two on the third (one basal and one postmedian); on the prothorax the scales are formed into slightly-arched lines extending from base to apex, and appearing as continuations of the basal markings on elytra. The scales appear to be easily abraded, as on only one of the three specimens before me are they present on the rostrum. On two of them the scales of the upper surface are of a pale yellow, but on the third they are almost of a snowy whiteness. The outline is almost exactly as in the preceding species, but the punctures are much more distinct owing to the very different clothing.

# Section 7.

### BARIS EBENINA, n. sp.

Black, shining; scape piceous-red. Glabrous.

Head with very indistinct punctures. Rostrum moderately thin, distinctly longer than prothorax; with coarse punctures at sides and rather fine ones elsewhere; a feeble transverse impression marking its junction with head, but the impression narrowly foveate in middle. Scape inserted about two-fifths from apex of rostrum. Prothorar with small and rather sparse but clearly-defined punctures. Elytra cordate, outline continuous with that of prothorax; striæ very narrow, but towards base with fairly numerous, round, clearly-defined punctures encroaching on the interstices; these each with a row of almost microscopic punctures. Fermora edentate. Length,  $2\frac{1}{2}$  mm.

Hab.-Queensland: Barron Falls (A. Koebele).

In general appearance somewhat like *glabra*, but rostrum longer, prothoracic punctures sparser, and elytral punctures and interstices and the prosternum different.

#### Section 8.

#### BARIS POROSA, n. sp.

Black. opaque. Lower surface, legs, and rostrum with minute indistinct scales or setæ, elsewhere glabrous or almost so.

*Head* with dense but indistinct punctures. *Rostrum* stout, slightly shorter than prothorax, very coarsely punctate except for a rather narrow shining line from between

antennæ to apex. Scape inserted almost in exact middle of rostrum. Prothorax with very dense and moderately large punctures. Elytra elongate, cordate, not much wider than prothorax, punctate-striate, punctures in striæ deeply set; interstices coarsely punctate, each puncture almost extending from stria to stria. Under surface (abdomen to a less extent) and legs coarsely punctate; femora almost edentate. Length,  $3\frac{1}{2}$  mm.

Hab.—Queensland: Cairns (Macleay Museum), Mackay (C. French).

Much more densely punctate than any other species of the subfamily known to me.

#### GYMNOBARIS, n. g.

*Head* small, eyes rather distant. *Rostrum* rather long and thin, moderately curved. Antennæ thin, scape inserted nearer apex than base of rostrum, first joint of funicle large. *Prothorax* transverse. *Elytra* subcordate. Prosternum with a wide and feeble groove, bounded on each side by a feeble carina to near the coxæ, these very widely separated. Pygidium concealed. *Femora* feebly grooved and dentate.

The entirely concealed pygidium readily distinguishes this genus from *Baris*, to several Australian species. of which it would otherwise appear to be allied; from *Ipsichora* it is distinguished by its slightly grooved prosternum and much more widely separated front coxæ.

### GYMNOBARIS POLITUS, n. sp.

Black, highly polished; scape reddish. Glabrous except for a few indistinct scales or setæ on under surface and legs, front tibiæ with long cilia at apex in male.

*Head* with sparse and minute but fairly distinct punctures. *Rostrum* thin, distinctly longer than prothorax, with moderately large and dense punctures at sides, but small and sparse elsewhere. Scape inserted two-fifths from apex of rostrum, basal joint of funicle as long as three following combined. *Prothorax* with sparse and minute punctures, sides oblique to near apex and then suddenly diminishing to apex. *Elytra* subcordate, shoulders closely clasping prothorax with which their outline is continuous: finely striate, two sutural striæ with a few round punctures towards base: interstices each with a row of minute, distant punctures. *Femora* rather feebly dentate. Length, 4 mm.

Hab.-Queensland: Cairns (Macleay Museum).

The punctures in the elytral interstices are so minute as to be practically invisible.

#### IPSICHORA.\*

There are five species before me which I refer to this genus, previously unknown from Australia, but numerously represented in the Malay Archipelago. Its main features appear to be the rostrum long and not gibbous at base, scape extending close to but not reaching the eye, front coxæ widely separated and the femora grooved and dentate. The species are all of a more or less metallic blue or violet. Three of those noted here (mesosternalis, desiderabilis, and Macleayi) have the pygidium small but visible, and causing the fifth abdominal segment to appear feebly emarginate at tip: in the others the pygidium is quite concealed and the fifth segment is continuously rounded: these differences, if the stated characters of the subfamily were strictly adhered to, would divide the species between two sections, but they are all evidently congeneric.

The Australian species may be tabulated as follows: — Side pieces of mesosternum practically impunctate ... ... ... mesosternalis, n. sp. These parts with large punctures.

These parts with large punctures.	
Femora edentate	desiderabilis, n. sp.
Femora dentate.	
Femora partly red	femorata, Pase.
Femora entirely dark.	
Prothorax with minute punc-	
tures	Macleayi, n. sp.
Prothorax with small but no?	,
minute punctures	duplicata, n. sp.
minine principality in the	

# IPSICHORA FEMORATA, Pasc.+

Two specimens from Kuranda probably belong to this species; they differ from the original description, however, in having only the four hind femora reddish in the middle, instead of apparently the whole six.

#### Ipsichora mesosternalis, n. sp.

Of a brilliant metallic blue, antennæ almost black. Glabrous except for a few indistinct setæ on legs and apex of abdomen.

*Head* impunctate. *Rostrum* thin, strongly curved and (including the head) fully twice the length of prothorax; with distinct (but not dense or coarse) punctures at sides and very sparse ones or absent elsewhere. Scape inserted twofifths from apex of rostrum; two basal joints of funicle equal in length. *Prothorar* with sparse and minute punctures. *Elytra* elongate-cordate, outline almost continuous with that

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<sup>\*</sup> Pascoe: Journ. Linn. Soc. Zool., xii., p. 58.

<sup>+</sup> l.c. p. 59.

of prothorax: rather finely striate, punctures in striæ small, but usually slightly encroaching on interstices; each of these with a row of minute punctures. Under surface with sparse and minute punctures, side pieces of mesosternum practically impunctate. Pygidium small, but distinct. Femora feebly dentate. Length, 5 mm.

Hab.-Queensland: Somerset (C. French), Cairns (Macleay Museum).

Of the two specimens before me one has a distinct, whilst the other has a slight, purplish gloss. It is the only species of the subfamily known to me in which the side pieces of the mesosternum are not impressed with large punctures.

### IPSICHORA DESIDERABILIS, n. sp.

Of a brilliant metallic blue: under surface, legs, and rostrum of a more or less metallic green; antennæ almost black. Glabrous.

Head with small and indistinct punctures. Rostrum (for the genus) fairly stout, slightly longer than prothorax ; with fairly large and distinct punctures on sides, sparse and minute elsewhere. Scape inserted about one-third from apex of rostrum : basal joint of funicle as long as the two following combined. Prothorux with minute and rather sparse but clearly defined punctures. Elytra elongate-subcordate, outline quite continuous with that of prothorax : punctures much as in preceding species, except that in the three sutural striæ near the base they are distinctly rounded. Under surface with irregularly distributed punctures of variable size, but larger on side pieces of mesosternum than elsewhere. Pygidium small but distinct. Femora edentate. Length,  $3\frac{1}{2}$ -5 mm.

Hab.—Queensland: Cairns (Macleay Museum and H. Hacker).

The edentate femora and comparatively short rostrum will readily distinguish from the other Australian species. There are six specimens before me, of which four, probably the males, have the pygidium fairly distinct, and a large round fovea on the apical segment of the abdomen : the others have the pygidium smaller and the fovea absent.

### IPSICHORA MACLEAVI, n. sp.

Black, highly polished, with a more or less distinct purplish gloss; antennæ (base of scape reddish) almost black. Glabrous, except for some very indistinct setæ on legs and sides of under surface.

*Head* with sparse and minute punctures. *Rostrum* thin, twice the length of prothorax: punctures fairly dense and large on sides behind antennæ, sparse and small elsewhere.

Scape inserted in middle of rostrum; basal joint of funicle as long as the two following combined, second as long as the two following combined. Prothorax with sparse and minute punctures, but with larger ones margining the base. Elytra shaped as in mesosternalis, but with punctures as in the preceding species. Under surface with small and irregularly distributed punctures, becoming larger on mesosternum, and especially Pugidium concealed. Femora acutely denon its flanks. tate. Length,  $4\frac{3}{4}$  mm.

Hab.-N.S. Wales: Morpeth (Macleay Museum), Macleay River (R. Helms).

Although a beautiful insect, the colour is much less bright and metallic than in the other species of Ipsichora. Of the two specimens before me one has a decided purplish gloss on both upper and lower surfaces, but in the other this gloss is almost absent.

### IPSICHORA DUPLICATA, n. sp.

Of a briliant metallic purplish-blue; rostrum black. but in places glossed with green or purple; antennæ (base of scape obscure red) black. Under surface and legs with thin setose scales in punctures, elsewhere glabrous.

*Head* with rather small but clearly-defined punctures. Rostrum about once and one-half the length of prothorax; punctures clearly defined and not very sparse, and on the sides behind antennæ becoming rather dense and coarse. Antennæ as in the preceding species. Prothorax and elytra of the same shape as in mesosternalis, but prothorax with considerably larger and clearly defined (but still small) punctures, and a distinct row margining the base; elvtral striæ with fairly numerous punctures encroaching on the interstices, and each of these on basal half with a feeble double row, and beyond middle a single row of minute punctures. Under surface with small punctures, but becoming large on mesosternum, especially on its flanks. Pygidium concealed. Femora acutely dentate. Length, 5½ mm. Hah.—Queensland: Darling Downs (C. French).

Close to the preceding species, but larger and with considerably larger and somewhat different punctures.

A specimen, from the Endeavour River in the Macleay Museum, has the under surface quite glabrous, and the prothoracic punctures somewhat larger.

### MYCTIDES.

This genus is widely distributed in the Malav Archipelago, and two species of it have already been recorded from Queensland. Its members have the rostrum very long, scape terminated some distance from the eye, femora feebly

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dentate, prosternum wide, not grooved, front coxæ distant, and the pygidium exposed. According also to Pascoe, "the males of all the species have the rostrum somewhat straighter, with the apical half within closely bearded."\*

Of the species hitherto recorded from Australia, barbatust seems to be close to imberbis, t but is described as black with the rostrum fuscous, the basal joint of the funicle twice as long as the second, the prothorax with small and sparse punctures, and the elvtral interstices "subtiliter sparse punctulatis." All of which are at variance with imberbis, apart from its beardless rostrum. There is a bearded male in the Macleav Museum from the Endeavour River which may be burbatus; it is deep black without metallic gloss, the prothoracic punctures finer than in imberbis (but certainly not sparse), and the punctures in the elytral interstices minute and not transverse; its rostrum, however, is just as dark as the rest of its body. Familiaris is described as a large (5 mm.) black species, with the prothorax sparsely punctured, its rostrum is apparently bearded in the male : I do not think that I have seen it.

#### Myctides imberbis, n. sp.

Black, shining; with (except on head and rostrum) a metallic purplish gloss; antennæ obscurely (or not at all) diluted with red. Lower surface and legs moderately densely clothed with white or whitish scales, denser at apex of prosternum than elsewhere: upper surface, head, and rostrum glabrous.

*Head* with dense, clearly defined but not large punctures. *Rostrum* thin, much longer than prothorax; with coarse punctures at extreme base and on sides behind antennæ, small and sparse elsewnere. Scape inserted in middle of rostrum; basal joint of funicle once and one-half the length of second. *Prothorar* with fairly dense and rather large clearly-defined punctures, becoming denser and larger on sides. *Elytra* wide and subcordate, outline almost continuous with that of prothorax; with distinct striæ, towards base with punctures encroaching (especially in the two sutural rows) on interstices, towards sides punctures deeply impressed, but not interfering with interstices; these with short transverse scratches instead of punctures. *Femora* finely, but acutely dentate. Length,  $4\frac{1}{2}$ - $5\frac{1}{2}$  mm.

*Hab.*—Queensland: Cooktown (C. French), Kuranda (H. H. D. Griffith).

<sup>‡</sup> One of my specimens of this species bears a label, in the Rev. T. Blackburn's writing, *Myctides barbatus*, Pasc.

<sup>\*</sup> Ann. Mus. Civ. Gen., 1885, p. 293.

<sup>+</sup> Described originally as from Batchian.

Judging by the antennæ both sexes of this species are before me, and in neither is the rostrum barbed; in one specimen (presumably the male) the rostrum is at least once and one-third the length of the prothorax, in two others (presumably the females) it is much longer. In one specimen of each sex the scape is at rest in its scrobe, with the rest of the antenna directed forward; in the male the funicle and club extend distinctly more than halfway to the apex of the rostrum from the tip of the scape, in the female they extend considerably less than halfway to the apex.

#### MYCTIDES BALANINIROSTRIS, n. sp.

Black, highly polished; scape obscurely diluted with red. Clothing as in the preceding species, except that it is sparser.

*Head* with fairly numerous and small but clearly-defined punctures. *Rostrum* thin, except at the base, considerably longer than prothorax ; punctures as in the preceding species. Scape inserted slightly nearer base than apex; basal joint of funicle as long as the two following combined. *Prothorax* less transverse than in the preceding species; with comparatively small and rather sparse but sharply-defined punctures. *Elytra* subcordate, closely clasping prothorax, deeply striate, the punctures in the striæ deeply impressed and scarcely, even towards the base, encroaching on the interstices, each of these (except towards the base where they are more or less irregularly doubled) with single rows of minute punctures. *Femora* almost edentate. Length,  $3\frac{1}{2}$ -5 mm.

Hab.—Queensland: Endeavour River, Cairns (Macleay Museum).

There are five specimens before me, varying considerably in size, but apparently of one sex.

### ACYTHOPEUS ATERRIMUS, Waterh.\*

#### Baris orchivora, Blackb.

Described by Waterhouse from Singapore as attacking orchids, subsequently described as a *Baris* by Blackburn, also as attacking orchids, and figured in the *Agricultural Gazette* of New South Wales<sup>†</sup> under the latter's name. The species is readily distinguished by its opaque surface and peculiarly granulated elytral interstices. Mr. Waterhouse sent **a** specimen of his *aterrimus* to Mr. Froggatt, who kindly allowed me to examine it and compare it with a specimen of *orchivora*, reared by himself from orchids, and there is no doubt

+ 1904, fig. 2, in a plate facing p. 514.

<sup>\*</sup> Ent. Mo. Mag., vol. x., p. 226.

about the identity of the same. Waterhouse's is the earlier name.

Waterhouse referred the species to *Baridrus*, but stated that it would probably enter into Pascoe's genus *Acythopeus*.\* It seems to me, however, that the species cannot be referred to *Acythopeus*.† of which Pascoe says that the scape is remote from the eye; in *aterrimus* it extends quite close to the eye; he also says:—"Near *Myctides*, only the rostrum is very much curved and thickened at the base." Certainly in *aterrimus* the outlines are very different from the two figures of the rostrum and head as figured for *tristis* and *bigeminatus*.‡ The sculpture of the elytra also is very different to that described by Pascoe in the five species known to him. But as the species is an introduced one I have not felt justified in proposing a new generic name for it.

#### SOLENOBARIS, n. g.

*Head* comparatively large. Eyes large, round, and close together. *Rostrum* moderately stout, the length of prothorax, moderately curved. Antennæ stout: scape inserted about middle of rostrum, resting in a shallow scrobe, and extending back to the eye: I basal joint of funicle stout. *Prothorax* slightly transverse. *Elytru* cordate. Prosternum with a moderately wide and deep pectoral canal, sharply limited on the sides and terminated behind front coxæ. *Abdomen* large, first segment slightly longer than the two following combined. *Pyyidium* rounded and distinct. Legs moderately long. *Femora* not very stout, feebly or not at all dentate.

At first sight apparently belonging to the *Cryptorhynchides*, and close to *Idotasia* of that subfamily, but the side pieces of the mesosternum are unusually large and are typical of the *Baridiides*; the pygidium is also distinct. The pectoral canal, however, is quite as in many of the *Cryptorhynchides*, as is also the intercoxal process of the mesosternum. I think the genus should be referred to the very end of the *Baridiides*.

# SOLENOBARIS DECIPIENS, n. sp.

Deep black, shining, antennæ almost black. Glabrous. Head rather densely and strongly punctate. Rostrum

<sup>\*</sup> At that time (January, 1874) unpublished.

<sup>†</sup> It is certainly not a *Baris*, however, as the prosternum is without the slightest trace of a longitudinal impression.

<sup>‡</sup> Journ. Linn. Soc. Zool., xii., pl. iii., figs. 11a and 17.

 $<sup>\</sup>P$  It really does extend back to the eye, although when set out it apparently does not do so.

stout, compressed. dilated to apex: coarsely punctate at sides and distinctly but not coarsely elsewhere. Prothorax with moderately small and not dense punctures, larger on flanks than on disc. Elytra cordate; at sides and near suture feebly striate, elsewhere scarcely visibly so: near base. especially about suture, with rows of rather large, round, distant punctures, disappearing before the middle, a few punctures about shoulders, elsewhere impunctate. Mesosternum with intercoxal process depressed between coxæ, raised transverse and narrow in front, and its sides angularly produced to front coxæ: side pieces with larger punctures than elsewhere. Pygidium densely and strongly punctate. Femora feebly grooved and feebly bidentate, the teeth level, subequal in size, and marking the termination of the ridges bordering the grooves. Length,  $2\frac{3}{7}$  mm.

Hab.-Queensland: Endeavour River (Macleav Museum).

Remarkably close in general appearance to *Baris ebe*nina, but the prosternum with a deep pectoral canal. The intercoxal process of the mesosternum on a first glance appears to form part of the prosternum.

#### SOLENOBARIS EDENTATA, n. sp.

Black, shining, upper surface with a bluish gloss. Glabrous.

*Head* rather sparsely and finely punctate. Eyes rather larger and closer together than in the preceding species. *Rostrum* almost parallel-sided, punctate at sides. *Prothorax* longer than in preceding species: moderately strongly punctate, punctures not much larger on sides than on disc. *Elytra* rather longer than in the preceding species, all the striæ traceable: punctures much as in the preceding species, but larger. Intercoxal process of *mesosternum* transverse and feebly concave, side pieces with larger punctures than elsewhere. *Femora* very feebly grooved and edentate. Length,  $1 \pm$  mm.

Hab.-Queensland: Barron Falls (A. Koebele).

In many respects different to the preceding species, but with the same deep and sharply limited pectoral canal. A second specimen differs from the type in being slightly smaller, with larger punctures and with a bronzy gloss.